



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/075,058	02/11/2002	Simon Turner	010108	7484

23696 7590 01/23/2006

QUALCOMM, INC
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

NGUYEN, HANH N

ART UNIT	PAPER NUMBER
----------	--------------

2668

DATE MAILED: 01/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/075,058

Applicant(s)

TURNER, SIMON

Examiner

Hanh Nguyen

Art Unit

2668

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Application filed on 02/11/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.



HANH NGUYEN
PRIMARY EXAMINER

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

Figures 1-4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 17-26 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitation "a resume command" in line 6. There is insufficient antecedent basis for this limitation in the claim.

In claim 17, lines 4 and 7, it is not clearly stated what is meant by "send an indication...."

Claims 18-26 are rejected because they depend on claim 17 respectively.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6, 8-17, 19-23, 27-29 and 31 are rejected under 35 USC 102(e) as being anticipated by Vanghi (US Pat. 6,937,861 B2).

In claims 1, 10, 16 and 31, Vanghi discloses a method of conducting wireless data communications (see fig.4) comprising receiving a packet data transmission from a first wireless network (access terminal 14 receives ACK message comprising traffic channel assignment from radio network 22 , see col.8, lines 8-15); transmitting a pause command to the first wireless network (access terminal 14 suspends its connection with the radio network 22, see col.8, lines 20-25); reconfiguring a receiver from a mode corresponding to communication with the first wireless network to a mode corresponding to communication with a second wireless network (suspends its connection with the radio network 22 to perform idle state processing with radio network 28, see col.8, lines 20-40); monitoring a paging channel of the second wireless network (col.5, lines 30-40; access terminal 14 periodically monitors paging channels transmitted from radio network 28 for incoming call, incoming pages); reconfiguring the receiver from the mode corresponding to communication with the second wireless network to the mode corresponding to communication with the first wireless network (once completing the idle state processing with the radio network 28, access terminal 14 returns to its previous connection to radio network 22, col.8, lines 40-47); and transmitting a resume command to the first wireless

network (access terminal 14 provides information to network 22 indicating that it is returning from the period of suspension, see col.8, lines 50-55).

In claims 17, 19 and 27, Vanghi substantially discloses most of limitations as disclosed in the rejection of claim 1 above, In addition, Vanghi discloses the access terminal 14 is configured with a suspension timer such that the access terminal 14 can keeps track of how long its connection with radio network 22 was suspended (a timer configured to send an indication at a time near a start of a paging slot; see col.7, lines 40-50).

In claims 2, 3, 22 and 23, Vanghi discloses, in fig.1, transmitting a pause command to the first wireless network includes transmitting a pause command to a packet data serving node (PDSN 24) via the first wireless network (radio network 22), and wherein transmitting a resume command to the first wireless network (radio network 22) includes transmitting a resume command to the packet data serving node (PDSN 24) via the first wireless network; and receiving packet data transmission from packet data serving node (PDSN 24) via the first network (radio network 22).

In claim 11, Vanghi discloses the steps of transmitting a resume command to the first wireless network, wherein said monitoring occurs between said transmitting a pause command and said transmtting a resume command in claim 1 above.

In claim 6, 8, 9, 12, 13, 14, 15, 20, 21, 28 and 29, Vanghi discloses the pause command including null data rate as well as the resume comand includes non-null data rate as indicated in claim 1.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 5, 18, 24, 26, 30 are rejected under 35 USC 103(a) as being unpatentable over Vanghi (Pat. 6937861 B2).

In claims 5, Vanghi does not disclose the pause command includes a command to reduce a data rate. However, Vanghi discloses the access terminal 14 periodically switches to an idle mode for about 100ms to check for paging messages transmitted from radio network 28 (see col.45-55). Therefore, an office notice is taken that spending this amount of time in the Idle mode of Vanghi would have been obvious to have the reduced data rate. The motivation being saving power consumption and minimizes interference between different access terminals 14.

In claim 24, Vanghi discloses the access terminal is further configured and arranged to receive the packet data transmissions (receiving traffic channel assignment; fig.4, col.8, lines 10-15) from the first wireless network over a traffic channel; and wherein, near a start of the paging slot (at some later point in time), a mode of the access terminal is changed from a mode corresponding to the traffic channel (suspending traffic channel) to a mode corresponding to the paging channel (to monitor for incoming pages). See col.8, lines 20-27 and col.5, lines 35-42. unit is changed from a mode corresponding to the traffic channel to a mode corresponding to the paging channel. Vanghi does not disclose the access terminal comprising a physical layer control unit configured to receive packet and change from traffic channel to paging channel. An office notice is taken that having a control unit in an access

terminal is well-known in the art to control operation of access unit. Therefore, it would have been obvious to comprise a physical layer control unit in an access terminal of Vanghi to receive packet transmission and change from traffic channel to paging channel. The motivation is to provide access terminal capability of receiving incoming communications from one wireless network even while it is active on another wireless network.

In claim 26, as disclosed by Vanghi in claim 24 above, when when the access terminal 14 completes its connection with radio network 28 (paging channnnel), it resumes communications with radio network 22 (traffic channel) by transmitting on reverse link channel (changing from paging channel to traffic channel). See col.5, lines 52-55.

In claims 18 and 30, Vanghi does not disclose the indication includes an interrupt request signal. The office notice is taken that sending an interrupt request signal representing a pause command at a time near a start of a paging slot is well-known in the art. Therefore, it would have been obvious to send an interrupt request command in Vanghi at a time near a start of paging slot to suspend the connection with radio network 22.

Claim 4, 7 and 25 are rejected under 35 USC 103(a) as being unpatentable over Vanghi (Pat. 6,937,861 B2) in view of Rajaniemi et al. (US Pat. 6,487,399 B1).

In claims 4, 7 and 25, Vanghi does not disclose reconfiguring the receiver including changing a frequency of a RF stage. Rajaniemi et al. discloses a multi-mode, dual band mobile terminal 10 (fig.2) communicating with a network 32 (first wireless network) at a GSM1900 carrier (a first mode) at 200KHz (a first frequency) and another network 32' (a second network) at TDMA1900 carrier (a second mode) at 30 KHz (a second frequency). The mobile station 10 tunes its receiver 16 (fig.1) at 200 KHz, and then converts the frequency to 30 KHZ.

See Abstract. Therefore, it would have been obvious to one ordinary skilled in the art to use the tuning frequency of Rajaniemi et al. into Vanghi to change the frequency of the access terminal corresponding from a frequency corresponding to IS-856 mode to a frequency corresponding to IS 2000 mode. The motivation is to reduce interference between dual networks.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lundby et al. (US pat. 6,985,453 B2);

Willars et al. (US Pat. 6,889,050 B1);

Turner (US Pat. 6,738,373 B2).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Nguyen whose telephone number is 571 272 3092. The examiner can normally be reached on Monday-Friday from 8:30 to 4:30. The examiner can also be reached on alternate

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chieh Fan, can be reached on 571 272 3042. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Art Unit: 2668

system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Hanh Nguyen

Primary Examiner

HANH NGUYEN
PRIMARY EXAMINER